

PRODORYLAIMUS ANDRASSY, 1959 (NEMATODA):
PROPOSED DESIGNATION OF A TYPE SPECIES UNDER THE
PLENARY POWERS. Z.N.(S)2129

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In 1959 Andrassy (*Acta zool. Acad. Sci. Hungaricae* vol. 5: 196) erected the new genus *Prodorylaimus*, designating as type species *Dorylaimus longicaudatus* Bütschli, 1874, and giving a key to the four originally included species.

2. The description of *D. longicaudatus* by Bütschli, 1874 (*Abh. Senckenb. naturforsch. Ges.* vol. 9: 256) is very insufficient. He says: 'I only want to mention this species as I cannot describe it exactly' (See Appendix). The type locality was not indicated. The material consisted of a few juvenile specimens, of which some dimensions were given, the most notable of which was the tail length, 0.78 mm. No dorylaim is known in which the juvenile stages have such a long tail. As *D. longicaudatus* was found in garden soil with *D.* (now *Paralongidorus*) *maximus*, it may be inferred that the type locality is somewhere in southern Germany. Examination of ten soil samples from this region — and from localities where *P. maximus* occurs — did not yield any dorylaim conforming to Bütschli's description. The further morphology of *D. longicaudatus* was said not to differ from that of other *Dorylaimus* species. At that time, however, the genus *Dorylaimus* contained species now placed in several families of the Order Dorylaimida: DORYLAIMIDAE, APORCE-LAIMIDAE, ACTINOLAIMIDAE, NYGOLAIMIDAE, DISCOLAIMIDAE, LONGIDORIDAE and BELONDIRIDAE. Long-tailed species occur in quite a number of genera of these families: *Prodorylaimus*, *Mesodorylaimus*, *Dorylaimus*, *Laimydorus*, *Paradorylaimus*, *Ischiodorylaimus*, *Oxydirus*, *Xiphinema*, *Actinolaimus* and others. Thus *D. longicaudatus* is a *species dubia* verging on the status of a *nomen nudum*. It is uncertain to which of the families named above it belongs. The type specimens are not preserved.

3. It would be possible to fix the meaning of *D. longicaudatus* by means of a neotype: after all, many species of the older authors were described insufficiently and no types are preserved. To treat all such names as *nomina dubia* would cause great nomenclatural and taxonomic confusion. However, whereas in many such cases a neotype can be designated from topotypes, that is impossible in the

case under consideration because the type locality is not known. In many cases, also, there is a tradition that can be maintained if there are no strong reasons against it, but in the present case there are such reasons, and the tradition should be maintained.

4. In 1876 (*Tijdschr. ned. dierkd. Ver.* vol. 2: 78-196), 1880 (*ibid.* vol. 5: 1-104) and 1884 (*Die frei in den reinen Erde und im süßen Wasser lebenden Nematoden der niederländischen Fauna*, Leiden, Brill, 206 pp.), de Man described, under the name *D. longicaudatus* Bütschli, a nematode species from the Netherlands. Subsequently the name appeared regularly in the literature and was evidently used in de Man's sense — this is the tradition referred in the preceding paragraph. The few measurements given by Bütschli are against the supposition that this tradition is correct; his specimens were at most larvae of the third stage (witness his remark on the gonad primordium); they had a body length of 2.9 mm and a tail length of 0.78 mm. *D. longicaudatus* sensu de Man is, when adult (i.e. two stages later) 2.5-3.6 mm long and has a tail of 0.4-0.6 mm. It is utterly improbable that the adult female should be no longer than the third-stage larva and have a much shorter tail. If 'proof' is too strong a word, this is a strong reason against the conspecificity of *D. longicaudatus* Bütschli and *D. longicaudatus* auctorum. The latter must evidently be renamed. A subjective junior synonym is available: *Prodorylaimus longicaudatoides* Altherr, 1968, *Limnologica* (Berlin) vol. 6: 270-272.

5. In Andrassy's key mentioned in the first paragraph, some measurements were given for *P. longicaudatus* which show that his concept of the species was different from both Bütschli's and de Man's. The true identity of Andrassy's *P. longicaudatus* is uncertain; probably it is a composite compiled from several literature data. In 1969, however (*Opusc. zool. Inst. Zoosyst. Univ. Budapest* vol. 9 (2): 189), Andrassy gave a reference to de Man, 1876 and 1884 and (: 190-192) redescribed *P. longicaudatus*; his description clearly shows that he is dealing with *P. longicaudatoides*.

6. It is thus certain that the genus *Prodorylaimus* was based upon a misidentified type species, so that the matter must be laid before the Commission. There are three possibilities:

- (a) following Art. 70a(iii), *D. longicaudatus* Bütschli, 1874 is designated as type species. This is undesirable because it would make *Prodorylaimus* a *genus dubium* and would result in great nomenclatural instability;
- (b) following Art. 70a(i), *D. longicaudatus* sensu Andrassy, 1959 is designated as type species. This is also undesirable because the identity of this species is uncertain and

it has no name of its own.

- (c) following Art. 70a(ii), *D. longicaudatus* in the sense in which it has been used since 1876, i.e. *P. longicaudatoides*, is designated as type species. As good descriptions of this species exist and its identity is unambiguous, this seems the best solution.

7. The International Commission on Zoological Nomenclature is accordingly requested:

- (1) to use its plenary powers to set aside all designations of type species hitherto made for the nominal genus *Prodorylaimus* Andrassy, 1959 and, having done so, to designate *Prodorylaimus longicaudatoides* Altherr, 1968 as type species of that genus;
- (2) to place the generic name *Prodorylaimus* Andrassy, 1959 (gender: masculine), type species by designation under the plenary powers in (1) above, *Prodorylaimus longicaudatoides* Altherr, 1968, on the Official List of Generic Names in Zoology;
- (3) to place the specific name *longicaudatoides* Altherr, 1968, as published in the binomen *Prodorylaimus longicaudatoides* (specific name of type species of *Prodorylaimus* Andrassy, 1959) on the Official List of Specific Names in Zoology.

APPENDIX

Original description of *Dorylaimus longicaudatus* Bütschli, 1874.

‘Auf diese Art erlaube ich mir hier nur hinzuweisen, da ich nicht im Stande bin, dieselbe in ihren Eigenthümlichkeiten genau zu beschreiben. Sie zeichnet sich durch die bedeutende Länge ihres haarfein auslaufenden Schwanzes aus. Da ich jedoch von ihr nur unreife Thiere sah, so bin ich über ihre Gesammtlänge ungewiss, jedoch scheint dieselbe nich unbeträchtlich zu sein, da ein Thier von 2.9 mm noch keine weitere Entwicklung seiner bohnenförmigen Geschlechtsanlage zeigte. Die Länge des Schwanzes betrug bei demselben 0.78 mm ($\frac{1}{3}$ – $\frac{1}{4}$ der Körperlänge). Der Oesophagus mass $\frac{1}{5}$ der Körperlänge. Die übrigen Charaktere waren sämmtlich wenig verschieden von denen der übrigen Arten dieser Gattung. Das Thier fand sich mit der vorhergehenden Art in derselben Gartenerde.’

(Note: ‘die vohergehende Art’ is *Dorylaimus* (now *Paralongidorus*) *maximus*).